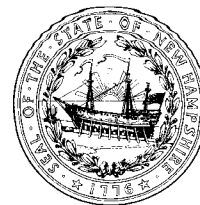




The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Thomas S. Burack, Commissioner

February 10, 2009

Mr. Thomas Burack, Chairman
N.H. Site Evaluation Committee
Dept. of Environmental Services
29 Hazen Drive
Concord, New Hampshire 03301

Re: Granite Reliable Power Wind Park in Coos County

Dear Chairman Burack:

Please find enclosed the N.H. Department of Environmental Services proposed findings and conditions for the 401 Water Quality certificate (WOC), Wetlands permit and the Alteration of Terrain permit.

Sincerely,

Rene Pelletier, P.G.
Assistant Director
Water Division

cc Service List

Section 401 Water Quality Certification (WQC)
Findings and Conditions Pending Public Comment

(As stated in the November 10, 2008 status report to EFSEC, DES intends to issue a draft 401 WQC for a 30 day public comment period. DES intends to issue the 401 WQC for public comment from mid February to mid March, 2009. It is possible that some of the conditions reported below may change as a result of public comment. Should they change, DES will provide a revised set of Section 401 WQC Findings and Conditions to EFSEC prior to April 6, 2009, when a final decision is to be made.)

D. FINDINGS

- D-1. The Activity reviewed for this 401 Certification consists of the construction and operation of a new wind power facility consisting of 33 wind turbines and associated electrical interconnection facilities including 2 electrical substations, upgrading approximately 20 miles of existing gravel logging roads, and construction of approximately 12 miles of new gravel access roads in Coos County in the Town of Dummer and the unincorporated places of Dixville, Erving's Location, Millsfield and Odell.
- D-2. The Activity requires water quality certification under Section 401 of the federal Clean Water Act and New Hampshire RSA 485-A:12, III.
- D-3. The Activity will result in a discharge and may cause the permanent alteration of, or temporary impacts to surface waters.
- D-4. Storm water runoff, including snowmelt, and groundwater flow to surface waters from within the area affected by the Activity during warm and cold-weather conditions are discharges under the definitions of Env-Ws 1702.18.
- D-5. Surface waters that could be potentially affected by the Activity and their associated DES assessment unit (AU) numbers (where available) include the following: Androscoggin River (NHRIV400010603-04), Pontook Reservoir (NHLAK400010602-11), Pond Brook (NHRIV400010602-12 and NHRIV400010602-13), Little Dummer Pond (NHLAK400010602-07), Big Dummer Pond (NHLAK400010602-06), Newell Brook (NHRIV400010602-10), Phillips Brook (NHRIV801010704-03 and NHRIV801010704-04), 3 Unnamed Tributaries to Phillips Brook, Watkinson Brook, West Branch Phillips Brook (NHRIV801010704-03), Kelley Brook (NHRIV801010704-03), West Inlet to Millsfield Pond, West Branch Clear Stream (NHRIV400010502-02), an unnamed tributary to Clear Stream, Clear Stream (NHRIV400010502-01), Cascade Brook (NHRIV400010502-01), and various unnamed wetlands adjacent to the Activity.

The potentially affected surface waters are Class B waterbodies; Class B New Hampshire surface water quality standards (SWQS) apply to the Activity. Class B waterways are considered suitable for aquatic life, primary and secondary contact recreation, fish consumption, wildlife, and, after adequate treatment, as a water supply.

According to the NH Fish and Game Department on February 6, 2009, the brooks, streams, rivers, ponds/lakes in the vicinity of the proposed Activity are considered cold water fisheries.

- D-6. In accordance with RSA 162-H:7, the Activity requires a Certificate of Site and Facility from the New Hampshire Site Evaluation Committee.
- D-7. The Activity includes dredge and fill of wetlands. The 401 Certification decision relies, in part, on an approved permit from the DES Wetlands Bureau for the potential construction-related impacts to jurisdictional wetlands, which include all surface waters identified in D-5 of this 401 Certification. Through its processing, and anticipated issuance, the DES wetlands permit will address the dredge and fill impacts to jurisdictional wetlands.
- D-8. The Activity may temporarily or permanently impact surface water hydrologic conditions, such as peak runoff. The 401 Certification decision relies, in part, on an approved permit from the DES Alteration of Terrain Program for the potential construction and operation-related impacts to surface hydrology. Through its processing and anticipated issuance, the DES Alteration of Terrain permit will address the impacts to surface water hydrology and peak flows.
- D-9. Primary water quality issues of concern associated with the Activity include potential increases in turbidity and benthic deposits due to land disturbance and wet weather discharges of settleable and suspended solids during and after construction of the Activity; potential increases in water temperature due to reductions in riparian canopy and shading; potential increases in phosphorus and nitrogen due to the addition of fertilizers which can lead to excessive aquatic plant growth; potential spills of lubricating oil for the turbines and electrical transmission facilities; the potential application of herbicides and pesticides; and the potential application of deicing materials, especially those containing chloride such as "rock salt" during the winter months. Other pollutants typically associated with vehicular traffic are not a concern as the project will only result in 2 to 3 vehicle trips per week.
- D-10. To control erosion and deposition of settleable and suspended solids in surface waters, the Activity has been designed with the following features: 1) the use of gravel surfaces with stabilized side slopes for access roads and pads that will resist disturbance by vehicular traffic 2) culverts spaced at frequent intervals under access roads to minimize concentration of stormwater flow to ensure that stormwater and shallow groundwater that travels downslope will continue downslope with little diversion by roadside ditches 3) diversion of precipitation on steeper roadway surfaces through use of rubber diverters installed across the roadway at regular intervals to shorten flow path length and reduce erosion forces 4) stabilized ditches to resist erosion, 4) construction of sediment traps at culvert outlets, 5) strategically located outlet locations to provide longer travel times and filtering distances to surface waters, 6) construction of grass treatment swales at select locations, 7) construction of sediment basins at sub-station pads and 8) typical temporary erosion control measures during construction such as silt fences, hay bales, stone check dams etc.

The 401 Certification decision relies, in part, on an approved permit from the DES Alteration of Terrain Program which will ensure that erosion control measures are designed to meet state requirements. Construction and maintenance of erosion control measures as proposed and in accordance with DES Alteration of Terrain permit requirements are not expected to result in water quality violations for turbidity or benthic deposits due to settleable and suspended solids.

To ensure that erosion control measures are functioning properly and are protective of surface waters during construction, erosion control inspections and turbidity monitoring can be required. With regards to inspection of erosion control measures during construction, the plans referenced in **Error! Reference source not found.** of this 401 Certification, which are also part of the Alteration of Terrain permit application, indicate that the following will be done:

A Certified Professional in Erosion and Sediment Control or a Professional Engineer licensed in New Hampshire ("Monitor"), shall be employed to regularly inspect the site;

The Monitor shall inspect the site at least once a week and if possible during any ½ inch or greater rain event (i.e., ½ inch of precipitation or more within a 24 hour period) or within 24 hours of such an event;

The Monitor shall provide technical assistance to the Contractor on appropriate Best Management Practices for Erosion and Sediment Control requirements;

Within 24 hours of each inspection, the Monitor shall submit a report to DES via email. Such reports shall include photographs of the site that are representative of the Activity.

The above construction inspection and reporting requirements, combined with turbidity sampling and a requirement that a sufficient quantity of erosion control supplies shall be kept on site to expeditiously respond to erosion control issues, should be sufficient to ensure and confirm that proposed erosion control measures during construction are not causing or contributing to surface water quality violations.

Similar inspection, maintenance and monitoring can be required to ensure that permanent erosion control measures continue to function properly after construction.

- D-11. The potential discharge of lubricating oils to the ground and surface waters from the turbines and electrical transmission facilities associated with the Activity is a potential water quality concern. The Applicant has stated in its 401 Water Quality application that they will prepare a Spill Prevention Control and Countermeasure (SPCC) Plan in accordance with EPA criteria. The SPCC Plan will address operating procedures to prevent oil spills, control measures installed to prevent oil from entering surface waters and countermeasures to contain, clean up and mitigate the effects of and oil spill. Proper

implementation of an approved SPCC Plan is expected to prevent water quality violations associated the discharge of lubricating oils.

- D-12. During construction of the Activity, improper management of concrete washout activities could result in surface water quality violations. The Applicant proposes to prohibit such discharges through signage and designation of washout areas designed to contain concrete wash water. Preparation and implementation of a DES approved concrete wash water plan can be required to prevent potential water quality violations due to concrete wash water.
- D-13. Operation of the Activity could result in the application of herbicides to control vegetation along access roads, pads and in the power line corridors. Improper application of herbicides can harm aquatic life and result in surface water quality violations. An email sent to DES on November 13, 2008 by Horizon's Engineering Inc. on behalf of the Applicant, stated that herbicide use will be limited to just the switchyard and substation areas. "This is due to safety concerns about using mechanized equipment (weed-whackers, and the like) around electrical equipment. If needed, herbicides will be applied in conformance with best management practices and per manufacturers recommendations. For all other areas vegetation management (typically once-a-year mowing of turbine pads and roadside slopes) will generally be done with a flail-type mower or rotary bush hog. Occasional management of successional growth under powerlines will be done through mechanized means (typically a "Brontosaurus" type of boom mower) only." It is expected that such limited use of herbicides applied in accordance with best management practices and per manufacturer's recommendations will not significantly impact surface water quality.
- D-14. Maintenance of roads during the winter can sometimes involve application of de-icing chemicals that contain chloride (i.e. rock salt), which is potential water quality concern. Chlorides are conservative substances that persist in the environment. Frequent application of road salt can result in levels of chloride in surface waters that are harmful to aquatic life. In an email sent to DES on November 10, 2008 by Horizons Engineering on behalf of the Applicant, the following is stated: "Winter access for preventative maintenance will be done using tracked equipment (snowmobiles and snowcats), however plowing may be needed for unscheduled maintenance of turbines that require large or heavy component replacement if oversnow transport is not a feasible option. During such an unplanned event it is possible that sand or a sand/salt blend might need to be applied to the plowed road surface to aid in traction of a transport vehicle hauling a replacement part. Again, these type of events are considered infrequent and would be used if all other reasonable options (such as over snow transport) have been exhausted first." "The blending of salt with the sand is generally done to keep the sand from freezing so that the sand can be loaded into a spreading vehicle to be applied to roadway to aid in traction. Given the anticipated infrequent nature of needing a plowed access to a portion of the site (unforeseen equipment breakdown and replacement), the ability to find dry sand that is free from any salt in the dead of winter may severely hamper the ability to make repairs to their infrastructure." It is expected that such limited use of sand and chloride will not significantly impact surface water quality.

- D-15. Projects involving alteration of terrain can result in discharges to surface waters of nutrients such as phosphorus and nitrogen that can lead to excessive aquatic plant growth and impairment of aquatic life and contact recreational uses such as swimming or wading. Application of fertilizers can be a primary source of nutrients. An email sent to DES on November 13, 2008 by Horizon's Engineering on behalf of the Applicant, stated the following: "Fertilizers will only be used for initial vegetation establishment if soils analyses indicate a need for fertilizer. In such case the fertilizer will be applied only at agronomic rates indicated by such soil analyses." It is expected that a one time application of fertilizer with fertilizer application rates for nitrogen, phosphorus and potassium based on soils analyses coupled with requirements to only use fertilizers with slow release nitrogen and no pesticides will not result in any significant impacts to surface water quality.
- D-16. Projects involving alteration of terrain can result in water temperature increases due to removal of vegetation adjacent to surface waters that provide natural shading, construction of impervious surfaces such as pavement and rooftops and construction of best management practices such as detention ponds. Significant temperature increases can adversely impact the Biological and Aquatic Community Integrity (Env-Wq 1703.19) of surface waters especially in temperature sensitive cold water fisheries. The Activity has been designed to minimize thermal increases by utilizing gravel instead of impervious pavement for access roads and pads, by maintaining natural vegetated buffers to surface waters (except at stream crossings) that will aid in the re-assimilation of runoff into the ground where it can be cooled and enter the groundwater table, and by avoiding the use of best management practices that detain stormwater such as detention ponds. Construction of the proposed stormwater system for the Activity is not expected to result in any significant increase in water temperature and, therefore, should not cause or contribute to impairment of the Biological and Aquatic Community Integrity (Env-Wq 1703.19).
- D-17. Confirmation that the Activity does not cause or contribute to surface water quality violations can be determined by development and implementation of a surface water monitoring plan with appropriate quality assurance/ quality control provisions.

E. WATER QUALITY CERTIFICATION CONDITIONS

- E-1. The Activity shall not cause or contribute to a violation of surface water quality standards. If DES determines that surface water quality standards are being violated as a result of the Activity, DES may modify this 401 Certification to include additional conditions to ensure the Activity complies with surface water quality standards, when authorized by law, and after notice and opportunity for hearing.
- E-2. The Applicant shall allow DES to inspect the Activity and its effects on affected surface waters at any time to monitor compliance with the conditions of this 401 Certification.

- E-3. The Applicant shall consult with DES regarding any proposed modifications to the Activity, including construction or operation, to determine whether this 401 Certification requires modification in the future.
- E-4. The Applicant shall comply with the conditions of the DES Wetlands Bureau Permit issued for the Activity by the DES Wetlands Bureau, including any amendments. The conditions shall become conditions of this 401 Certification upon issuance of this 401 Certification. This 401 Certification approval is contingent upon issuance of the DES Wetlands Bureau permit.
- E-5. The Applicant shall comply with the conditions of the DES Alteration of Terrain Program Permit issued for the Activity by the DES Terrain Alteration Bureau, including any amendments. The conditions shall become conditions of this 401 Certification upon issuance of this 401 Certification. This 401 Certification approval is contingent upon issuance of the DES Alteration of Terrain Program permit.
- E-6. Unless otherwise authorized by DES, the Applicant shall keep a sufficient quantity of erosion control supplies on the site at all times during construction to facilitate an expeditious (i.e., within 24 hour) response to any construction related erosion issues on the site.
- E-7. Unless otherwise authorized by DES, the Applicant shall prepare a turbidity sampling plan to confirm that measures to control erosion during construction are not causing or contributing to surface water quality violations. The plan shall include sampling locations, sampling protocols and quality assurance quality control provisions. The plan shall be submitted to DES for approval at least 90 days prior to construction. The applicant shall then implement the approved plan. Unless otherwise authorized by DES, the turbidity sampling results along with station ID, date, time, other field notes, and a description of corrective actions taken when violations of state surface water quality criteria for turbidity are found, shall be submitted to DES via electronic mail within 48 hours of collection.
- E-8. Unless otherwise authorized by DES, the Applicant shall develop and submit a monitoring plan to DES for approval at least 90 days prior to construction. The purpose of the plan is to confirm that the Activity is not causing or contributing to violations of state surface water quality standards. The plan shall include the parameters to be sampled, the location, timing and frequency of sampling, sampling and laboratory protocols, quality assurance / quality control provisions as well as when data will be submitted to DES. The applicant shall consult with DES and submit the monitoring data in a format that can be automatically uploaded into the DES Environmental Database. Once approved by DES, the Applicant shall implement the sampling plan.
- E-9. In order to ensure the long-term effectiveness of approved stormwater practices, the Applicant shall develop an Inspection and Maintenance (I & M) plan approved by DES. Unless otherwise authorized by DES, the I & M plan shall comply with the requirements of the Alteration of Terrain regulations (Env-Wq 1500 – effective 01-01-2009), section Env-Wq 1507.08 Long Term Maintenance. Prior to construction, the Applicant shall submit the I & M plan to DES for approval and then implement the approved plan.

- E-10. The Applicant shall prepare and submit a Spill Prevention, Control, and Countermeasures plan (SPCC) for the Activity in accordance with federal regulations (40 CFR part 112). The Applicant shall submit the plan to DES Watershed Management Bureau for review and approval at least 90 days prior to the installation of the first turbine. The SPCC Plan shall include, but not be limited to, operating procedures to prevent oil spills, control measures installed to prevent oil from entering surface waters, countermeasures to contain, clean up and mitigate the effects of an oil spill, and facility inspections. The Applicant shall then implement the approved plan.
- E-11. The Applicant shall submit a plan to prevent water quality violations due to discharges of concrete wash water during construction. The Applicant shall submit the plan to DES Watershed Management Bureau for review and approval at least 90 days prior to placement of any concrete within the Activity area. The Applicant shall then implement the approved plan.
- E-12. Herbicide use associated with the Activity shall be minimized to the maximum extent possible and shall only be allowed on a limited, as-needed basis in the switchyard and substation areas to control vegetation that could otherwise disrupt operation of the Activity. Herbicides shall only be applied in strict accordance with the manufacturers recommendations. Unless otherwise authorized by DES, the Applicant shall maintain records of herbicide use, including the name and brand of herbicide used, the date herbicides were applied, where they were applied, and the amount used. Such records shall be provided to DES within 30 days of receiving a request from DES.
- E-13. Unless other authorized by DES, fertilizers shall only be applied once on soils disturbed during construction to support the initial establishment of vegetation. Prior to fertilizer application, soils shall be tested to determine the minimum amounts of lime, nitrogen (N), phosphorus (P) and potassium (K) needed to support vegetation. Lime application rates, fertilizer selection (in terms of N, P and K content) and fertilizer application rates shall be consistent with the soil test results. Fertilizers shall not contain any pesticides. Where possible, fertilizer with slow release nitrogen shall be used. Soil test results, the name, brand and nutrient content (N, P and K) of fertilizer and application rates for lime and fertilizer shall be provided to DES within 30 days of receiving a request from DES.
- E-14. To the maximum extent possible, winter access for maintenance or other purposes shall be accomplished using tracked equipment (i.e., snowmobiles and snowcats). Plowing and/or sanding of roads (including use of sands containing chloride) for winter access shall be minimized to the maximum extent possible, and shall only be allowed when over-snow transport using tracked equipment is not feasible (i.e., such as for the unscheduled maintenance of turbines that require large or heavy component replacement that cannot be transported over-snow). Unless otherwise authorized by DES, the Applicant shall maintain records of the dates when chloride was applied, the reason it was applied, and the estimated amount of chloride applied on each date. The Applicant shall submit such records to DES within 30 days of receiving a request from DES.

E-15. The terms and conditions of this 401 Certification may be modified and additional terms and conditions added as necessary to ensure compliance with New Hampshire surface water quality standards, when authorized by law, and after notice and opportunity for hearing.

WETLANDS BUREAU CONDITIONS

PROJECT DESCRIPTION:

Dredge and fill 587,722 square feet (13.49 acres) of wetlands, perennial and intermittent streams (impacting 11,451 linear feet) to construct a power generating wind park that will include the construction of 33 wind turbines (3.0 megawatts each), approximately 12 miles of new access roads, and upgrading approximately 20 miles of existing logging roads. Work will include improving existing culvert crossings within intermittent and perennial streams with properly sized culverts and bridges to improve aquatic resource passage, sediment transport, and overall stream stability. Mitigate environmental impacts by executing a conservation easement on 620 acres of undeveloped land within Columbia and Erving's Location, and by negotiating an agreement with the NH Fish & Game Department to preserve high-elevation habitat (land above 2,700 square feet in elevation) to protect sensitive wildlife species, such as American marten, Bicknell's thrush, and American three-toed woodpecker. Mitigation will also include the creation of 8 vernal pools, totaling 3,600 square feet, within the proposed easement areas to provide suitable herpetological habitat.

PROJECT SPECIFIC CONDITIONS:

1. All work shall be in accordance with the revised plans by Horizons Engineering, PLLC dated December 2008, as received by the Department on January 5, 2009; and by revised plans dated and received on February 6, 2009.
2. Any further alteration of areas on this property that are within the jurisdiction of the DES Wetlands Bureau will require a new application and further permitting by the Bureau.
3. This approval is contingent on approval by the DES Alteration of Terrain Bureau.
4. At least 48 hours prior to the start of construction, a pre-construction meeting shall be held with DES Land Resources Management Program staff at the project site or at the DES Office in Concord, NH to review the conditions of the Wetlands and Terrain Alteration programs. It shall be the responsibility of the permittee to schedule the pre-construction meeting, and the meeting shall be attended by the permittee, his/her professional engineer(s), wetlands scientist(s), and the contractor(s) responsible for performing the work.
5. All stream work shall be done during low flow conditions.
6. Appropriate siltation/erosion/turbidity controls shall be in place prior to construction, shall be maintained during construction, and remain in place until the area is stabilized. Silt fence(s) must be removed once the area is stabilized.
7. Discharge from dewatering of work areas shall be to sediment basins that are: a) located in uplands; b) lined with hay bales or other acceptable sediment trapping liners; c) set back as far as possible from wetlands and surface waters, in all cases with a minimum of 20 feet of undisturbed vegetated buffer.
8. Culvert outlets shall be protected in accordance with the DES Best Management Practices for Urban Stormwater Runoff Manual (January 1996) and the Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire (August 1992).
9. Proper headwalls shall be constructed within seven days of culvert installation.
10. Dredged material shall be placed outside of the jurisdiction of the DES Wetlands Bureau.

11. Within three days of final grading in an area that is in or adjacent to wetlands or surface waters, all exposed soil areas shall be stabilized by seeding and mulching during the growing season, or if not within the growing season, by mulching with tack or netting and pinning on slopes steeper than 3:1.
12. Where construction activities have been temporarily suspended within the growing season, all exposed soil areas shall be stabilized within 14 days by seeding and mulching.
13. Where construction activities have been temporarily suspended outside the growing season, all exposed areas shall be stabilized within 14 days by mulching and tack. Slopes steeper than 3:1 shall be stabilized by matting and pinning.
14. The contractor responsible for completion of the work shall utilize techniques described in the DES Best Management Practices for Urban Stormwater Runoff Manual (January, 1996) and the Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire (August, 1992).
15. In order to minimize final roadway widths, impacts from access road construction and turbine installation shall be restored and revegetated to the greatest extent practicable.

MITIGATION CONDITIONS:

Wetland construction:

16. This permit is contingent upon the creation of 8 vernal pools, totaling 3,600 square feet, in accordance with the revised plans received by DES on February 5, 2009.
17. The schedule for construction of the vernal pool creation areas shall coincide with site construction unless otherwise considered and authorized by the Wetlands Bureau.
18. The permittee shall designate a NH Certified Wetland Scientist (CWS) who will be responsible for monitoring and ensuring that the vernal pool creation areas are constructed in accordance with the mitigation plan. Monitoring shall be accomplished in a timely fashion and remedial measures taken if necessary. The Wetlands Bureau shall be notified in writing of the designated CWS prior to the start of construction and if there is a change of status during the project.
19. The final siting location of each of the proposed vernal pools within the easement areas shall be coordinated and field verified by the designated CWS, Wetlands Bureau staff, and a NH Fish & Game Biologist.
20. An updated final plan showing the location of the selected vernal pool sites shall be submitted to DES and for review and approval prior to their construction.
21. The vernal pool creation areas shall be properly constructed, monitored, and managed in accordance with the approved final mitigation plans, and remedial actions taken that may be necessary to create functioning wetland areas similar to those of the wetlands destroyed by the project. Remedial measures may include replanting, relocating plantings, removal of invasive species, changing soil composition and depth, changing the elevation of the wetland surface, and changing the hydrologic regime.
22. The designated CWS shall conduct follow-up inspections during the first 3 consecutive breeding seasons, to review the success of the vernal pool creation areas and to schedule remedial actions if necessary. A report outlining these follow-up measures and a schedule for completing the remedial work shall be submitted to DES by August 1 of each year, for a total of 3 years of monitoring.
23. The permittee shall attempt to control invasive, weedy species such as purple loosestrife (*Lythrum salicaria*) and common reed (*Phragmites australis*) by measures agreed upon by the

Wetlands Bureau if the species is found in the mitigation areas during construction and during the early stages of vegetative establishment.

24. A post-construction report documenting the status of the completed project with photographs shall be submitted to the Wetlands Bureau within 60 days of the completion of the vernal pool creation areas.

Land preservation:

25. This permit is contingent upon the execution of a conservation easement on 620 acres as depicted on revised plans received by DES on February 5, 2009, and in accordance with the high-elevation mitigation plan (above 2,700' in elevation) that is negotiated and agreed upon with the NH Fish & Game Department.

26. The conservation easements to be placed on the preservation areas shall be written to run with the land, and both existing and future property owners shall be subject to this easement.

27. The plan noting the conservation easements with a copy of the final easement language shall be recorded with the Registry of Deeds Office for each appropriate lot. A copy of the recording from the County Registry of Deeds Office shall be submitted to the DES Wetlands Bureau prior to the start of construction.

28. The applicant shall prepare a report summarizing existing conditions within the conservation areas. Said report shall contain photographic documentation of the easement area, and shall be submitted to the DES and the grantee prior to construction to serve as a baseline for future monitoring of the easement area.

29. The conservation easement areas shall be surveyed by a licensed surveyor, and marked by monuments prior to construction, and the final easement plans showing the metes and bounds shall be submitted to DES for review and approval.

30. The final conservation easement language and stewardship plan for the high-elevation mitigation parcel(s) shall be submitted to DES prior to construction.

31. There shall be no removal of the existing vegetative undergrowth within the easement area and the placement of fill, construction of structures, and storage of vehicles or hazardous materials is prohibited.

32. Activities in contravention of the conservation easement shall be construed as a violation of RSA 482-A, and those activities shall be subject to the enforcement powers of the Department of Environmental Services (including remediation and fines).

GENERAL CONDITIONS:

33. A copy of this approval shall be posted on site during construction in a prominent location visible to inspecting personnel;

34. This approval does not convey a property right, nor authorize any injury to property of others, nor invasion of rights of others;

35. The DES Wetlands Bureau shall be notified upon completion of work;

36. This approval does not relieve the applicant from the obligation to obtain other local, state or federal permits that may be required;

37. Transfer of this approval to a new owner shall require notification to and approval by the Department;

38. This approval shall not be extended beyond the current expiration date.

39. This project has been screened for potential impacts to known occurrences of rare species and exemplary natural communities in the immediate area. Since many areas have never been

surveyed, or have received only cursory inventories, unidentified sensitive species or communities may be present. This permit does not absolve the permittee from due diligence in regard to state, local or federal laws regarding such communities or species.

40. The permittee shall coordinate with the NH Division of Historic Resources to assess and mitigate the project's effect on historic resources.

FINDINGS:

1. The project is classified as a Major Project per NH Administrative Rule Env-Wt 303.02(c), as wetland impacts are greater than 20,000 square feet.

2. On December 5, 2007, January 11, 2008, February 19, 2008, and March 27, 2008, DES held pre-application meetings with Noble Environmental Power and their agents, as well as US Fish & Wildlife Service, NH Fish & Game Department, and US Army Corps of Engineers to discuss the proposed project and methods of avoiding and minimizing wetland and wildlife related impacts.

3. On July 1, 2008, DES staff conducted a site inspection of the subject property to view wetland areas and other natural resources within the project vicinity, which included high-elevation habitats that are proposed to be impacted for road construction.

4. On July 29, 2008, DES received a Standard Dredge and Fill application that proposed impacting 644,188 square feet (14.8 acres) of wetlands to construct the proposed wind generation facility.

5. On July 29, 2008, DES issued a "Notice of Administrative Completeness" letter to the applicant and their agent.

6. On November 12, 2008, DES issued a "Request for More Information" letter to the applicant and their agent to address questions and concerns that were found during the technical review of the application.

7. On January 5, 2009, DES received revised plans and application that responded to concerns raised in the DES "Request for More Information" letter.

8. Additional plan revisions were emailed to DES on February 5, 2009 that modified the mitigation proposal based on continued negotiations with landowners and the NH Fish & Game Department, and on February 6, 2009 that modified the seeding specifications to better accommodate high-elevation growing conditions.

9. The applicant proposes to mitigate the environmental impacts by executing a conservation easement on 620 acres of undeveloped land within Columbia and Erving's Location, and by negotiating an agreement with the NH Fish & Game Department to preserve high-elevation habitat (land above 2,700 square feet in elevation) to protect sensitive wildlife species, such as American marten, Bicknell's thrush, and American three-toed woodpecker. Mitigation will also include the creation of 8 vernal pools, totaling 3,600 square feet, within the proposed easement areas to provide suitable herpetological habitat.

10. DES finds that the mitigation proposal meets the ratios as outlined in Chapter 800 of the Mitigation Rules.

11. The applicant has demonstrated by plan and example that each factor listed in Env-Wt 302.04(a) Requirements for Application Evaluation, has been considered in the design of the project.

12. Public hearings are being held by the New Hampshire Energy Facility Site Evaluation Committee (SEC) in March 2009 to allow citizens the opportunity to comment on the overall project.

13. The New Hampshire Energy Facility Site Evaluation Committee (SEC) has jurisdiction over the project and therefore will ultimately decide if the project is approved or denied by April 2009.

ALTERATION OF TERRAIN BUREAU CONDITIONS

PROJECT DESCRIPTION:

Construct a power generating wind park that will include the construction of 33 wind turbines (3.0 megawatts each), approximately 12 miles of new access roads, and upgrading approximately 20 miles of existing logging roads. The total area of contiguous disturbance has been calculated to be 202.87 acres (8,837,017 square feet).

PROJECT SPECIFIC CONDITIONS:

1. Water quality degradation shall not occur as a result of the project.
2. Revised plans shall be submitted for an amendment approval prior to any changes in construction details or sequences. The Department must be notified in writing within ten days of a change in ownership.
3. The Department must be notified in writing prior to the start of construction and upon the completion of construction.
4. The revised plans dated December 2008 and supporting documentation in the file are a part of this approval.
5. No construction activities shall occur on the project after expiration of the approval unless the approval has been extended by the New Hampshire Energy Facility Site Evaluation Committee (SEC).
6. This approval does not relieve the applicant from the obligation to obtain other local, state or federal permits that may be required (e.g. from US EPA, US Army Corps of Engineers, etc.) Projects disturbing over 1 acre may require a federal stormwater permit from EPA. Information regarding this permitting process can be obtained through the following e-mail address: www.des.state.nh.us/StormWater/construction.htm.
7. The smallest practical area shall be disturbed during construction activities.
8. Construction shall proceed in accordance with the "Overall Phasing Plan" developed by Horizons Engineering, PLLC, dated December 2008.
9. The project specific seeding specifications included on Sheet 143 are part of this approval
10. The permittee shall employ the services of an environmental monitor ("Monitor"). The Monitor shall be a Certified Professional in Erosion and Sediment Control or a Professional Engineer licensed in the State of New Hampshire and shall be employed to inspect the site from the start of alteration of terrain activities until the alteration of terrain activities are completed.
11. During this period, the Monitor shall inspect the subject site at least once a week, and if possible, during any ½ inch or greater rain event (i.e. ½ inch of precipitation or more within a 24 hour period). If unable to be present during such a storm, the Monitor shall inspect the site within 24 hours of this event.
12. The inspections shall be for the purposes of determining compliance with the permit. The Monitor shall submit a written report to the Department within 24 hours of the inspections. The reports shall describe, at a minimum, whether the project is being constructed in accordance with the approved sequence, shall identify any deviation from the conditions of this permit and the approved plans, and identify any other noted deficiencies.
13. The Monitor shall provide technical assistance and recommendations to the Contractor on the appropriate Best Management Practices for Erosion and Sediment Controls required to meet the requirements of RSA 485-A:17 and all applicable DES permit conditions.

SITE SPECIFIC CONDITIONS CONTINUED:

Page 2 of 2

14. Within 24 hours of each inspection, the Monitor shall submit a report with photographic documentation to DES via email (to Craig Rennie at: craig.rennie@des.nh.gov).
15. Prior to beginning construction, the contractor's name, address, and phone number shall be submitted to DES via email (see above).
16. All temporary impact areas for access road construction and staging areas shall be restored and replanted in accordance with the revised plans by Horizons Engineering dated December 2008.